	Application No.	Applicant(s)
Notice of Allowability	09/497,774	STERN ET AL.
	Examiner	Art Unit	
	Christian La Forgia	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _14 March 2006_.

2. ☒ The allowed claim(s) is/are _1-10,13,14,17-19,21-41,47 and 48_.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _Mailed w/ Action_ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Jeffrey Giunta (Reg. No. 42,583) on 30 May 2006.

The application has been amended as follows:

Claim 1 (Currently Amended)

A system for transmitting data in a data stream to grouped recipients, comprising:

a server, for receiving users' requests for transmission of user requested data in a data

flow for reception by a plurality of users;

said server for transmitting a plurality of data transmissions, each of the plurality of data

transmissions transmits the user requested data at one respective point of transmission location

that is different than other data transmissions within the plurality of data transmissions;

said server for defining a plurality of groups, wherein each group in the plurality of

groups is assigned to receive a respective data transmission within the plurality of data

transmissions, the respective data transmission corresponding to a respective point of

transmission location within the user requested data;

said server, independent of said user requests for data and while preserving the

impression to individual users requesting data that each is being immediately served with

requested data, for arranging a plurality of users into each of a respective group within the

plurality of groups; and

said server, responsive to the arrangement of the users in said plurality of groups, for

transmitting the plurality of data transmissions to each user according to each user's assigned

group so that each of the plurality of users assigned to a particular group receives data from the

same location within the user requested data;

and wherein the server is further for realigning a first user within the plurality of users

from a first group within the plurality of groups, the first group corresponding to users receiving

user requested data at a first location in the user requested data, to a second group, the second

group corresponding to users receiving user requested data at a second location in the user

requested data, so as to cause the first user to receive the same data as a second user previously

assigned to the second group;

the second location being selected by the server, independent of said user requests for

data, to change the location in the data from which the respective user is receiving the user

requested data to any location in the user requested data other than the first location in the user

requested data;

said server has a data communications interface for the transmitting of the plurality of

data transmissions, wherein the data communications interface comprises a plurality of ports

with each of said plurality of groups associated with a respective port, wherein each respective

port transmits the respective data transmission corresponding to its connected group wherein

each user assigned to a respective group is connected to the respective port for that respective

group; and

said server, realigning said first user to said second group by reconnecting said first user

to another of said respective ports.

Claim 11 (Cancelled)

Claim 12 (Cancelled)

Claim 13 (Currently Amended)

The system of claim [[12]] 48, wherein,

said respective ports have a plurality of respective sockets and each of said users is

connected to respective sockets according to the respective group to which the respective user is

assigned;

said server has a plurality of points, each point associated with a respective socket,

pointing into separate respective locations in said data store the server transmitting data retrieved

from said separate respective locations in said data store to said respective users through

respective sockets; and

said server realigning the respective user from the first group to the second group to

change a time in the transmission in said data flow said user is receiving by reconnecting said

respective user to another respective socket associated with another respective pointer.

Claim 14 (Currently Amended)

The system of claim [[12]] 48, wherein

each of said ports have a plurality of respective sockets and said respective users are each

connected to a respective socket;

said server has a plurality of pointers, each pointer associated with a respective socket,

pointing into separate respective locations in said data store, the server transmitting data

retrieved from said separate respective locations in said data store to said respective users

through said respective sockets; and

said server realigning the respective user from the first group to the second group to

change a time in the transmission in the transmission in said data flow said user is receiving by

moving said pointer for a respective socket to another location in said data store.

Claim 25 (Currently Amended)

A system comprising:

a server for transmitting user requested data in a data flow for reception by a plurality of

users requesting said data flow;

said server having means for connecting said server to a telecommunications network for

transmitting a plurality of data transmissions, each of the plurality of data transmissions

comprising a different point of transmission within the data flow; and

said server including means for responding to user requests for data, said user requests

being received from the telecommunications network;

said server for defining a plurality of groups, wherein each group in the plurality of

groups is assigned to receive a respective data transmission within the plurality of data

transmissions, the respective data transmission corresponding to a respective different point of

transmission within the data flow, so as to cause each user in a respective group to receive the dame data as all other users in the respective group;

the server for identifying the individual requesters as the source of respective user requests;

and wherein said server, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, arranging each of said individual requesters into a respective group, the respective group corresponding to a point of transmission of said data flow determined by time of request or by number of requests;

and the server for distributing the user load on said server and shifting said user load toward a steady state load on the server by distributing said users among the respective groups;

said server has a data communications interface for the transmitting of the plurality of data transmissions, wherein the data communications interface comprises a plurality of ports with each of said plurality of groups associated with a respective port, wherein each respective port transmits the respective data transmission corresponding to its connected group wherein each user assigned to a respective group is connected to the respective port for that respective group; and

said server, realigning said first user to said second group by reconnecting said first user to another of said respective ports.

Claim 33 (Currently Amended)

A method comprising the steps of:

receiving, at a server having a data store, users' requests for transmission of user

requested data in a data flow for reception by a plurality of users across a telecommunications

medium;

transmitting a plurality of data transmissions, each of the plurality of data transmissions

transmits the user requested data at one respective point of transmission location that is different

than other data transmissions within the plurality of data transmissions;

defining a plurality of groups, wherein each group in the plurality of groups is assigned to

receive a respective data transmission within the plurality of data transmissions, the respective

data transmission corresponding to a respective point of transmission location within the user

requested data;

independent of said user requests for data and while preserving the impression to

individual users requesting data that each is being immediately served with requested data,

arranging a plurality of users into each of a respective group within the plurality of groups; and

realigning, at the server, a first user within the plurality of users from a first group

corresponding within the plurality of groups, the first group corresponding to users receiving

user requested data at a first location in the respective user requested data, to a second group, the

second group corresponding to users receiving user requested data at a second location in the

user requested data, so as to cause the first user to receive the same data as a second user

previously assigned to the second group;

the second location being selected by the server, independent of said user requests for

data, to change the location in the data from which the respective user is receiving the user

requested data to any location in the user requested data other than the first location in the user

requested data;

said server has a data communications interface for the transmitting of the plurality of

data transmissions, wherein the data communications interface comprises a plurality of ports

with each of said plurality of groups associated with a respective port, wherein each respective

port transmits the respective data transmission corresponding to its connected group wherein

each user assigned to a respective group is connected to the respective port for that respective

group; and

said server, realigning said first user to said second group by reconnecting said first user

to another of said respective ports.

Claim 41 (Currently Amended)

In a system for transmitting data in a data stream sent from a server to a plurality of users

requesting access to said data stream at substantially the same time, a method comprising the

steps of,

sending at least one data stream from a server to a plurality of users that requested data

from the server;

transmitting a plurality of data transmissions, each of the plurality of data transmissions

transmits the user requested data at one respective point of transmission location that is different

than other data transmissions within the plurality of data transmissions;

defining a plurality of groups, wherein each group in the plurality of groups is assigned to

receive a respective data transmission within the plurality of data transmissions, the respective

data transmission corresponding to a respective point of transmission location within the user requested data;

arranging, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, said plurality of users into each of a respective group within the plurality of groups, the plurality of groups comprising a first group and a second group, each of said groups for reception of a respective data transmission transmitted from the server;

moving, independent of said user requests for data, one of the plurality of users from said first group to said second group for reception, by said one of the plurality of users, of user requested data at a point of said data flow relatively displaced in space or time from reception by said first group, so as to cause said one of the plurality of users to receive the same data as a second user previously assigned to the second group;

said server has a data communications interface for the transmitting of the plurality of data transmissions, wherein the data communications interface comprises a plurality of ports with each of said plurality of groups associated with a respective port, wherein each respective port transmits the respective data transmission corresponding to its connected group wherein each user assigned to a respective group is connected to the respective port for that respective group; and

said server, realigning said first user to said second group by reconnecting said first user to another of said respective ports.

Claim 47 (Currently Amended)

A computer program product for use in operating a computer, the computer program product including computer instructions comprising instructions for:

receiving, at a server, requests for data from users, said data being organized for transmission in a data flow from a data store;

transmitting a plurality of data transmissions, each of the plurality of data transmissions transmits the user requested data at one respective point of transmission location that is different than other data transmissions within the plurality of data transmissions;

defining a plurality of groups, wherein each group in the plurality of groups is assigned to receive a respective data transmission within the plurality of data transmissions, the respective data transmission corresponding to a respective point of transmission location within the user requested data;

the server, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, arranging said users in each of a respective group within the plurality of groups, wherein each of said groups corresponding to reception of a respective data transmission;

distributing a user load on the server and shifting the user load toward a steady stat load on the server by distributing the plurality of users among the groups assigned by [[by]] time of data stream transmission or by place in the data flow transmission; and

responsive to said user's requests, sending said user requested data in at least one data stream from said data store to said groups with users assigned to a respective group within said groups all receiving the same data;

said server has a data communications interface for the transmitting of the plurality of

data transmissions, wherein the data communications interface comprises a plurality of ports

with each of said plurality of groups associated with a respective port, wherein each respective

port transmits the respective data transmission corresponding to its connected group wherein

each user assigned to a respective group is connected to the respective port for that respective

group; and

said server, realigning said first user to said second group by reconnecting said first user

to another of said respective ports.

Claim 48 (Currently Amended)

A system for transmitting data in a data stream to grouped recipients comprising:

a server, for receiving users' requests for transmission of user requested data in a data

flow for reception by said users;

said server for transmitting a plurality of data transmissions, each of the plurality of data

transmissions transmits the user requested data at one respective point of transmission location

that is different than other data transmissions within the plurality of data transmissions;

said server for defining a plurality of groups, wherein each group in the plurality of

groups is assigned to receive a respective data transmission within the plurality of data

transmissions, the respective data transmission corresponding to a respective point of

transmission location within the user requested data;

said server, independent of said user requests for data and while preserving the

impression to individual users requesting data that each is being immediately served with

requested data, for arranging said users [[in]] into each of a respective group within the plurality

of groups, with each user being arranged in a respective group of the plurality of groups, and

wherein each user in each respective group receives an assigned respective data transmission and

the same data as all other users in that respective group;

said server, responsive to the arrangement of said users in the plurality of groups, for

transmitting said user requested data in said respective data stream to each said respective group,

and wherein the server for realigning a respective user;

from a first respective group corresponding to said respective user receiving user

requested data being transmitted at a first location in the user requested data;

to a second respective group corresponding to said respective user receiving transmission

of said user requested data being transmitted at the first location in the user requested data, so as

to cause the first user to receive the same data as a second user previously assigned to the second

group,

the second point in time being selected by the server, independent of said user requests

for data, to change the relative time the respective user is receiving the transmission of said user

requested data being transmitted at the first location in the user requested data;

said server has a data communications interface for the transmitting of the plurality of

data transmissions, wherein the data communications interface comprises a plurality of ports

with each of said plurality of groups associated with a respective port, wherein each respective

port transmits the respective data transmission corresponding to its connected group wherein

each user assigned to a respective group is connected to the respective port for that respective

group; and

said server, realigning said first user to said second group by reconnecting said first user

to another of said respective ports.

The following is an examiner's statement of reasons for allowance:

There are no teachings in the prior art said server has a data communications interface for

the transmitting of the plurality of data transmissions, wherein the data communications interface

comprises a plurality of ports with each of said plurality of groups associated with a respective

port, wherein each respective port transmits the respective data transmission corresponding to its

connected group wherein each user assigned to a respective group is connected to the respective

port for that respective group; and said server, realigning said first user to said second group by

reconnecting said first user to another of said respective ports. Since no teachings or motivation

can be found said server has a data communications interface for the transmitting of the plurality

of data transmissions, wherein the data communications interface comprises a plurality of ports

with each of said plurality of groups associated with a respective port, wherein each respective

port transmits the respective data transmission corresponding to its connected group wherein

each user assigned to a respective group is connected to the respective port for that respective

group; and said server, realigning said first user to said second group by reconnecting said first

user to another of said respective ports, claims 1-10, 13, 14, 17-19, 21-41, 47, and 48 are

therefore novel and non-obvious.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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